

Fujitsu recommends Windows.

# Data Sheet

## FUJITSU ESPRIMO P420 E85+ Desktop PC

### Your Immediately Deliverable Office PC

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The FUJITSU ESPRIMO P420 delivers high-quality computing for your office applications and projects at a very attractive price point. You can choose cost-optimized fixed configurations for immediate delivery. Alternatively, you can use configuration options to meet your specific hardware needs, while staying within your budget.

#### High performance and best price/performance ratio

Cost-effective system for price-conscious customers

- 4th generation Intel® Core™ processor family

#### Flexibility

Freedom of choice with tailored systems, perfect fit for specific requirements

- Flexible logistic concept - optional customizing program

#### Reliability

High-quality and functional stability

- Development and production in Europe

#### Lifecycle

Hardware continuity for long-term projects

- Managed lifecycle up to 12 months

#### Meets ENERGY STAR® requirements

Low power consumption and low costs, without any loss in performance

- Power supply with 85% efficiency



# Components

Processor	Intel® Core™ i7-4790 processor (4 Cores / 8 Threads, 3.60 GHz, up to 4.0 GHz, 8 MB, Intel® HD Graphics 4600) *
	Intel® Core™ i5-4690 processor (4 Cores / 4 Threads, 3.50 GHz, up to 3.9 GHz, 6 MB, Intel® HD Graphics 4600) *
	Intel® Core™ i5-4590 processor (4 Cores / 4 Threads, 3.30 GHz, up to 3.7 GHz, 6 MB, Intel® HD Graphics 4600) *
	Intel® Core™ i5-4460 processor (4 Cores / 4 Threads, 3.20 GHz, up to 3.4 GHz, 6 MB, Intel® HD Graphics 4600)
	Intel® Core™ i5-4440 processor (4 Cores / 4 Threads, 3.10 GHz, up to 3.3 GHz, 6 MB, Intel® HD Graphics 4600)
	Intel® Core™ i3-4160 processor (2 Cores / 4 Threads, 3.60 GHz, 3 MB, Intel® HD Graphics 4400)
	Intel® Pentium® processor G3450 (2 Cores / 2 Threads, 3.40 GHz, 3 MB, Intel® HD Graphics)
	Intel® Pentium® processor G3250 (2 Cores / 2 Threads, 3.20 GHz, 3 MB, Intel® HD Graphics)
	Intel® Celeron® processor G1840 (2 Cores / 2 Threads, 2.80 GHz, 2 MB, Intel® HD Graphics)
	*with Intel® Turbo Boost Technology (clock speed and performance will vary depending on workload and other variables)
Operating systems	
Operating system	Windows 8.1 Pro
	Windows 8.1
	Windows 7 Professional 64-bit
	Windows 7 Professional 32-bit
Operating system compatible	openSUSE Linux
Memory modules	2 GB (1 module(s) 2 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM
	4 GB (1 module(s) 4 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM
	8 GB (1 module(s) 8 GB) DDR3, unbuffered, non-ECC, 1,600 MHz, PC3-12800, DIMM
Hard disk notes	Up to 20 GB of HDD space is reserved for system recovery
	SSHD (Solid State Hard Disk, Hybrid drive)
	SSD (Solid State Disk)
	SED (Self-Encrypting Drive)
Hard disk drives (internal)	SSHD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch
	SSHD SATA III, 5,400 rpm, 500 GB, 2.5-inch
	SSD SATA III Premium, 512 GB, 2.5-inch
	SSD SATA III, 256 GB, 2.5-inch, SED
	SSD SATA III, 256 GB, 2.5-inch
	SSD SATA III, 128 GB, 2.5-inch, SED
	SSD SATA III, 128 GB, 2.5-inch
	HDD SATA III, 7,200 rpm, 2,000 GB, 3.5-inch
	HDD SATA III, 7,200 rpm, 1,000 GB, 3.5-inch
	HDD SATA III, 7,200 rpm, 500 GB, 3.5-inch
	HDD SATA III, 7,200 rpm, 250 GB, 3.5-inch
	HDD SATA II, 5,400 rpm, 320 GB, 2.5-inch
Graphics	NVIDIA® NVS 315, 1 GB
	NVIDIA® GeForce® GTX 745 2 GB FH, 2 GB
	NVIDIA® GeForce® GT630 DisplayPort 2GB FH, 2 GB
	NVIDIA® GeForce® 605 DisplayPort 1GB FH, 1 GB
	LFH59/ 2x DVI-I adapter cable
	LFH59/ 2x DP adapter cable
	DVI to VGA Adapter
	DP to DVI-D (single link) Adapter Cable
	ATI Radeon® HD7350 1GB FH, 1 GB
	AMD® Radeon R9 255 FH, 2 GB

<b>Drives (optional)</b>	BD Triple Writer SATA slim (tray)
	DVD-ROM
	DVD Super Multi
	MultiCard Reader 24in1 USB 2.0 3.5"

**Interface add on cards/components (optional)**

WLAN 802.11 a/g/n (2x2), (dedicated regions only, not for Indonesia)
USB 3.0 PCIe x1
Gigabit Ethernet PCIe x1, DS
Dual serial card PCIe x1

## Base unit

<b>Base unit</b>	ESPRIMO P420 E85+
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**Mainboard**

<b>Mainboard type</b>	D3230
<b>Formfactor</b>	µATX
<b>Chipset</b>	Intel® H81
<b>Processor socket</b>	LGA 1150
<b>Processor quantity maximum</b>	1
<b>Memory slots</b>	2 DIMM (DDR3)
<b>Supported capacity RAM (max.)</b>	16 GB
<b>Memory frequency</b>	1,600 MHz
<b>Memory notes</b>	Dual channel support. For dual channel performance, identical memory modules in each channel are necessary (minimum 2 modules).
<b>LAN</b>	10/100/1,000 MBit/s Realtek RTL8111G
<b>BIOS version</b>	AMI Aptio 4.6
<b>BIOS features</b>	BIOS Flash EPROM update by software Recovery BIOS Unified Extensible Firmware Interface (UEFI)
<b>Audio type</b>	On board
<b>Audio codec</b>	Realtek ALC671
<b>Audio features</b>	High Definition Audio, 5.1 surround sound

**I/O controller on board**

<b>Serial ATA total</b>	3
<b>thereof SATA III</b>	2
<b>Controller functions</b>	Serial ATA II (3 Gbit) Serial ATA III (6 Gbit) NCQ AHCI

**Interfaces**

<b>Audio: line-in</b>	1
<b>Audio: line-out</b>	1
<b>Front audio: microphone</b>	1
<b>Front audio: headphone</b>	1
<b>USB 2.0 total</b>	6
<b>USB 3.0 total</b>	2
<b>USB front</b>	2x 2.0
<b>USB rear</b>	2x 2.0/ 2x 3.0
<b>USB internal</b>	2x 2.0
<b>VGA</b>	1

**Interfaces**

DVI	1 (DVI-D)
Mouse / Keyboard (PS/2)	1/1
Ethernet (RJ-45)	1

**Input device / components**

	Optical USB wheel mouse
Input devices (optional)	Optical USB/PS2 tilt wheel mouse KBPC PX ECO Mouse M440 ECO

**Drive bays**

Drive bays total	5
3.5-inch internal bays	2
3.5-inch external bays	1
5.25-inch external bays	2
Drive bay notes	3,5" bay can be used for 2,5" drives

**Slots**

PCI-Express 2.0 x16	1 x (210 mm / 8.27 inch) Full height
PCI-Express x1	2 x (190 mm / 7.48 inch) Full height

**Graphics on board**

Graphics brand name	Intel® HD Graphics, HD Graphics 4400, HD Graphics 4600 (depending on processor)
Shared video memory	up to 1,782 MB
TFT resolution (VGA)	1,024 x 768 pixel 1,280 x 1,024 pixel 1,360 x 768 pixel 1,440 x 900 pixel 1,600 x 900 pixel 1,600 x 1,200 pixel 1,680 x 1,050 pixel 1,920 x 1,080 pixel
TFT resolution (DVI)	1,280 x 1,024 pixel 1,360 x 768 pixel 1,440 x 900 pixel 1,600 x 900 pixel 1,680 x 1,050 pixel 1,920 x 1,080 pixel 1,920 x 1,200 pixel
Graphics features	Dual display support DirectX® 11.1 HDCP support Open CL® 1.2 OpenGL® 4.0
Graphics notes	up to 1 GB dedicated video memory (main memory owned and locked for graphics use) Tested resolutions, depending on display type additional resolutions and frequencies possible Shared memory depending on main memory size and operating system Resolution (color depth up to 32 Bit/pixel) For TFT we recommend using 60Hz

**Electrical values**

Power efficiency note	power supply efficiency (at 230V; 20% / 50% / 100% load) : 83% / 86% / 85% 0-Watt mode with hard-off switch
Rated voltage range	100 V - 240 V
Rated frequency range	50 Hz - 60 Hz
Operating voltage range	90 V - 264 V
Operating line frequency range	47 Hz - 63 Hz
Max. output of single power supply	280 W
Power factor correction/active power	active
Monitor outlet	No

**Power consumption**

Power consumption note	See white paper Energy Consumption 0-Watt mode with hard-off switch
Link to Energy White Paper	<a href="http://docs.ts.fujitsu.com/dl.aspx?id=f4725e85-5d74-41f1-99a0-7ef55a8d713d">http://docs.ts.fujitsu.com/dl.aspx?id=f4725e85-5d74-41f1-99a0-7ef55a8d713d</a>

**Heat dissipation**

Heat dissipation notes	See white paper Energy Consumption
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**Noise emission**

Related Processors for noise	Intel® Core™ i7 4770
Standard noise emission	2x2 GB, HDD, ODD, Windows According to ISO 7779:2010, ECMA-74
Standard noise notes / description	A-weighted sound power level Lw <sub>ad</sub> (in B) / Workplace related A-weighted sound pressure level Lp <sub>Am</sub> (in dB(A)) Bystander position
Standard noise operation mode: CPU 50% load	3.4 B / 21 dB(A) Bystander; 25 dB(A) Operator position
Standard noise operation mode: HDD load	3.4 B / 21 dB(A) Bystander; 26 dB(A) Operator position
Standard noise operation mode: Idle mode	3.4 B / 20 dB(A) Bystander; 26 dB(A) Operator position
Standard noise operation mode: ODD load	4.6 B / 32 dB(A) Bystander; 38 dB(A) Operator position
Standard noise operation mode: Office applications 2.0	3.4 B / 20 dB(A) Bystander; 26 dB(A) Operator position

**Dimensions / Weight / Environmental**

Dimensions (W x D x H)	175 x 425 x 353 mm 6.89 x 16.74 x 13.9 inch
Operating position	Vertical
Weight	9 kg
Weight (lbs)	20.22 lbs
Weight notes	Actual weight may vary depending on configuration
Operating ambient temperature	10 - 35 °C (50 - 95 °F)
Operating relative humidity	5 - 85 % (relative humidity)

**Compliance**

Product	ESPRIMO P420
Model	MI4W
Germany	TÜV GS
Europe	CE
Global	RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment) Microsoft Operating Systems (HCT / HCL entry / WHQL) EPEAT® Gold (dedicated regions) ENERGY STAR® 6.0 (dedicated regions)
Compliance link	<a href="http://globalsp.ts.fujitsu.com/sites/certificates">http://globalsp.ts.fujitsu.com/sites/certificates</a>

**Additional Software**

Additional software (preinstalled)	Workplace Protect (secure authentication solution) Adobe® Reader® (pdf reader) McAfee Multi Access Security (anti-virus and internet security software; 60 days trial version) Win7: Fujitsu Recovery (hard disk based recovery) Win8: Microsoft Push Button Recovery (hard disk based recovery) Microsoft Office (buy license to activate the pre-installed Microsoft Office)
Additional software (optional)	Recovery DVD for Windows® Drivers & Utilities DVD (DUDVD) CyberLink PowerDVD BD (playback software for Blu-ray Disc™) CyberLink PowerDVD DVD (playback software for DVD) Nero Essentials XL

**Manageability**

Manageability technology	DeskUpdate Driver management PXE 2.1 Boot code Wake up from S5 (off mode) WoL (Wake on LAN)
Supported standards	DMI PXE WMI

**Security**

Physical Security	Kensington Lock support Eye for padlock
System and BIOS Security	Boot sector virus protection Write protect option for the Flash EPROM Control of external interfaces
User Security	User and supervisor BIOS password Hard disk password Access protection via external SmartCard reader (optional) Access protection via internal SmartCard reader (optional)

**Miscellaneous****Packaging information**

Packaging dimension (mm)	500 x 290 x 540 mm
Packaging dimension (inch)	19.69 x 11.42 x 21.26 inch
Max. quantity / pallet	24
Material - Weight (g) Carton	1270 g
Material - Weight (lbs) Carton	2.8 lbs
Material - Weight (g) EPS / PS	160 g
Material - Weight (lbs) EPS / PS	0.35 lbs
Material - Weight (g) PE	60 g
Material - Weight (lbs) PE	0.13 lbs
Packaging notes	printed user documentation is bleached in chlorine free process

**Warranty**

Standard Warranty	1 year
Service level	Bring-In / Onsite Service (for countries within region FTS CEMEA&I, for all other countries depending on local regulations, minimum: 1 year material warranty)
Warranty Terms & Conditions	<a href="http://support.ts.fujitsu.com/warranty">http://support.ts.fujitsu.com/warranty</a>

**Product Support Services - the perfect extension**

Recommended Service	9x5, Response Time: Next Business Day
Spare Parts availability	5 years after end of product life
Service Weblink	<a href="http://www.fujitsu.com/fts/services/support">http://www.fujitsu.com/fts/services/support</a>

## Recommended Accessories

Display E19-7 LED	The FUJITSU Display E19-7 LED combines comfortable ergonomics with best-in-class energy saving technology like ECO operation mode.	Order Code: S26361-K1482-V160
Display B24W-7 LED	The FUJITSU B24W-7 LED Display with excellent ergonomics makes intensive office work extremely comfortable. This highly reliable display offers superb usability and power-saving features to help reduce your labor as well as energy costs. With wide viewing angle technology, flexible connectivity, and easy manageability, the FUJITSU B24W-7 LED Display can help you improve productivity.	Order Code: S26361-K1497-V140

**Mouse M440 ECO**

Fujitsu Mouse M440 ECO is made from 100% bio material and has a completely PVC free cable. The elegant M440 ECO works on nearly every surface and follows all your hand movements smoothly and precisely. It features two main buttons and as well as a scroll wheel providing comfortable computing to both right and left-handed users.

Order Code:  
S26381-K450-L200

**SOUNDSYSTEM DS E2000 Air**

The new more powerful SOUNDSYSTEM DS E2000 Air gives you impressive, well-balanced sound throughout the frequency band. It is an unbeatable USB speaker set with a surprisingly small form factor. The robust satellite speakers are decorated with a deluxe piano finish and the base is adorned with warm ambient lighting.

Order Code:  
S26391-F7128-L600

**UC&C USB Headset Stereo H650e**

The UC&C USB Headset Stereo H650e is the ultimate in style and functionality. Long, uncomfortable work calls are a thing of the past thanks to the cushioned ear pads and crystal clear sound. Adjustable headband and microphone provides the perfect fit for everyone. Optimized for Microsoft® Lync™ the headset displays a red 'in-call' LED to let your co-workers know when you're available, thus helping to boost office productivity.

Order Code:  
S26391-F7139-L10

**Busylight UC Lync**

Boost communication and productivity in the office with the Busylight. The genius of this device is that it both advertises your present working state and promotes the use of Lync, making your office more efficient. Perfect for the work environment in open-plan offices, the Busylight makes users feel comfortable with Lync's features and eases the transition from traditional office internal telephone systems.

Order Code:  
S26391-F7139-L30

**HS E2000 Communicator Headset**

The Fujitsu HS E2000 Communicator headset allows you to use your personal computer for Voice over IP (VoIP) in stereo audio quality. This premium headset is designed to provide superb audio quality and comfort for the telephony, internet chat, speech recognition, video conferencing and multimedia applications.

Order Code:  
S26391-F7139-L5

**Keyboard KBPC PX ECO**

Fujitsu's KBPC PX ECO keyboard is the perfect contribution to Green IT. The keyboard is made out of 45% renewable raw material and comes with a PVC free USB cable. In addition, the KBPC PX ECO offers first class comfort and ergonomics. It attracts attention with its impressive modern design and useful extras.

S26381-K341-L1\*\* (\*\*: country specific variation)

**Keyboard KB900**

The KB900 is a very flat keyboard with extra low keys and spill-resistant protection. The elegant design and top-quality construction makes the KB900 the ideal input device for any PC or Notebook user. If you accidentally spill some water or coffee onto the keyboard, this special construction helps the liquid to flow away.

S26381-K560-L4\*\* (\*\*: Country specific variation)

# More information

## Fujitsu OPTIMIZATION Services

In addition to FUJITSU ESPRIMO P420 E85+, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

### Fujitsu Portfolio

Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

### Computing Products

[www.fujitsu.com/global/services/computing/](http://www.fujitsu.com/global/services/computing/)

### Software

[www.fujitsu.com/software/](http://www.fujitsu.com/software/)

## More information

Learn more about FUJITSU ESPRIMO P420 E85+, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.  
[www.fujitsu.com/fts/ESPRIMO](http://www.fujitsu.com/fts/ESPRIMO)

## Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment. Using our global know-how, we aim to contribute to the creation of a sustainable environment for future generations through IT. Please find further information at <http://www.fujitsu.com/global/about/environment>



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